

REMARKS

This application is believe to be in condition for allowance, and a favorable reconsideration is respectfully requested.

**Status of the Claims**

Claims 1, 2, 4, 7-15, and 19 remain pending in the application.

**Claim Rejections-35 USC §102**

Claims 1, 2, 4, 7-15, and 19 stand rejected under 35 U.S.C. §102(f) because applicants allegedly did not invent the claimed subject matter. This rejection is respectfully traversed.

The position of the Official Action was that the Enveloppe Soleau, for which a verified English translation was filed with the amendment of January 9, 2008, indicated two co-authors, i.e., Pascal JANVIER and Isa BENITEZ, who are not listed as named inventors of the claimed invention.

The previously filed response of March 31, 2009 provided a Declaration Under Rule 132. One of the named inventors of the present application, i.e., Bruno BUJOLI, declared that to the extent that the subject matter of any of claims 1, 2, 4, 7-15 and 19 is disclosed by the Enveloppe Soleau, this subject matter was conceived by the present inventors, and not the other co-authors

of the Enveloppe Soleau, Pascal JANVIER and Isa BENITEZ. Also, to the extent that the Enveloppe Soleau disclosed the subject matter of any of claims 1, 2, 4, 7-15 and 19, Bruno BUJOLI declared that this disclosure was conceived the present inventors, and not the other co-authors identified in the Enveloppe Soleau, Pascal JANVIER and Isa BENITEZ.

However, the Official Action objected to this declaration for not having all the inventors sign the declaration.

The Examiner's attention is respectfully directed to the appendix of this response. There are two new Declarations in which the remaining inventors (Charles TELLIER, Muriel PIPELIER, Didier DUBREUIL, and Daniel TALHAM) confirm that they have authorized Bruno BUJOLI (1) to explain that the claimed invention was completed prior to July 31, 2001 in the Declaration Under Rule 131 filed January 9, 2008 and (2) to address the issue of inventorship in the Declaration Under Rule 132 filed March 31, 2009.

Therefore, the named inventors of the present application Charles TELLIER, Muriel PIPELIER, Didier DUBREUIL, Bruno BUJOLI and Daniel TALHAM all confirm that they did invent the subject matter as claimed, and withdrawal of the rejection is respectfully requested.

**Claim Rejections-35 USC §103**

Claims 1, 2, 4, 7-15, and 19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over AGRAWAL et al. WO 2003/046508 A2 ("AGRAWAL") in view of PETRUSKA et al. 1998("PETRUSKA") and LOCKHART et al. US 5,556,752, and further in view of GAGNA et al. US 6,936,461. This rejection is respectfully traversed for the reasons below.

The Official Action objected to the previously filed declarations for not having all the inventors sign the declarations.

The present application claims priority to French application No. 02/09456 filed July 25, 2002.

Bruno BUJOLI, one of the named inventors declared, in a Declaration Under Rule 131 filed January 9, 2008, that an Enveloppe Soleau, dated April 30, 2001, was filed by Applicants with the French Patent Office (INPI) on May 17, 2001 to register a date for the claimed invention. Bruno BUJOLI further declared in the Declaration Under Rule 132 filed March 31, 2009 that the presently named inventors invented the claimed subject matter, i.e., as discussed above relative to the 102(f) rejection.

The two new Declarations Under Rule 132 in the appendix confirm that the remaining inventors (Charles TELLIER, Muriel PIPELIER, Didier DUBREUIL, and Daniel TALHAM) authorized Bruno BUJOLI (1) to explain that the claimed invention was completed prior to July 31, 2001 in the declaration filed January 9, 2008

and (2) to address the issue of inventorship in the declaration filed March 31, 2009.

Accordingly, the subject matter of any of claims 1, 2, 4, 7-15 and 19 has an effective date prior to the 102(e) dates of both AGRAWAL, i.e., November 9, 2001, and GAGNA, i.e., July 31, 2001.

Thus, neither AGRAWAL nor GAGNA qualify as prior art with respect to the claimed invention.

The remaining applied publications PETRUSKA and LOCKHART fail to render obvious the claimed invention.

PETRUSKA relates to a film of Langmuir-Blodgett type comprising metal (zirconium) phosphonates. PETRUSKA describes a solid support the surface of which is covered with zirconium by means of phosphonic acid (spacer) (see scheme 1, page 132). However, PETRUSKA fails to describe the bonding of a biopolymer with said solid support.

LOCKHART describes solid supports  $Y - L^1 - X^1 - L^2 - X^2$  (see column 8, line 30), wherein Y represents said solid support,  $L^1$  represents an optional spacer,  $L^2$  is a linking group having sufficient length such that  $X^1$  and  $X^2$  form a double-stranded oligonucleotide, and  $X^1$  and  $X^2$  represent a pair of complementary oligonucleotides.

However, LOCKHART fails to disclose or suggest solid supports having a surface of which is covered with a metal. Furthermore, the biopolymer of LOCKHART ( $X^1$  and  $X^2$

oligonucleotides) is linked to the solid support by means of a hydroxyl group (column 9, lines 43-45). Thus, LOCKHART fails to disclose an ionocovalent bonding between the metal surface of a solid support and the phosphate group of a biopolymer.

Thus, it would have been unobvious for one of ordinary skill in the art to even approach claimed biochip in view of PETRUSKA and LOCKHART, as there was no recognition of ionocovalent bonding between a metal surface and a phosphate group of a biopolymer.

Therefore, the proposed combination does not render obvious any of claims 1, 2, 4, 7-15 and 19, and withdrawal of the rejection is respectfully requested.

### **Conclusion**

In view of the foregoing remarks and accompanying declarations, this application is in condition for allowance at the time of the next Official Action. Allowance and passage to issue on that basis is respectfully requested.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized in this, concurrent, and future submissions, to charge any deficiency or credit any overpayment to Deposit Account No. 25-0120 for any

additional fees required under 37 C.F.R. § 1.16 or under 37  
C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON

/Robert A. Madsen/  
Robert A. Madsen, Reg. No. 58,543  
209 Madison Street, Suite 500  
Alexandria, VA 22314  
Telephone (703) 521-2297  
Telefax (703) 685-0573  
(703) 979-4709

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APPENDIX:

- Declaration Under Rule 132 signed by Charles TELLIER,  
Muriel PIPELIER and Didier DUBREUIL.\
- Declaration Under Rule 132 signed by Daniel TALHAM.